5 Macroeconomics: The Big Picture

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principles of macroeconomics

seventh edition

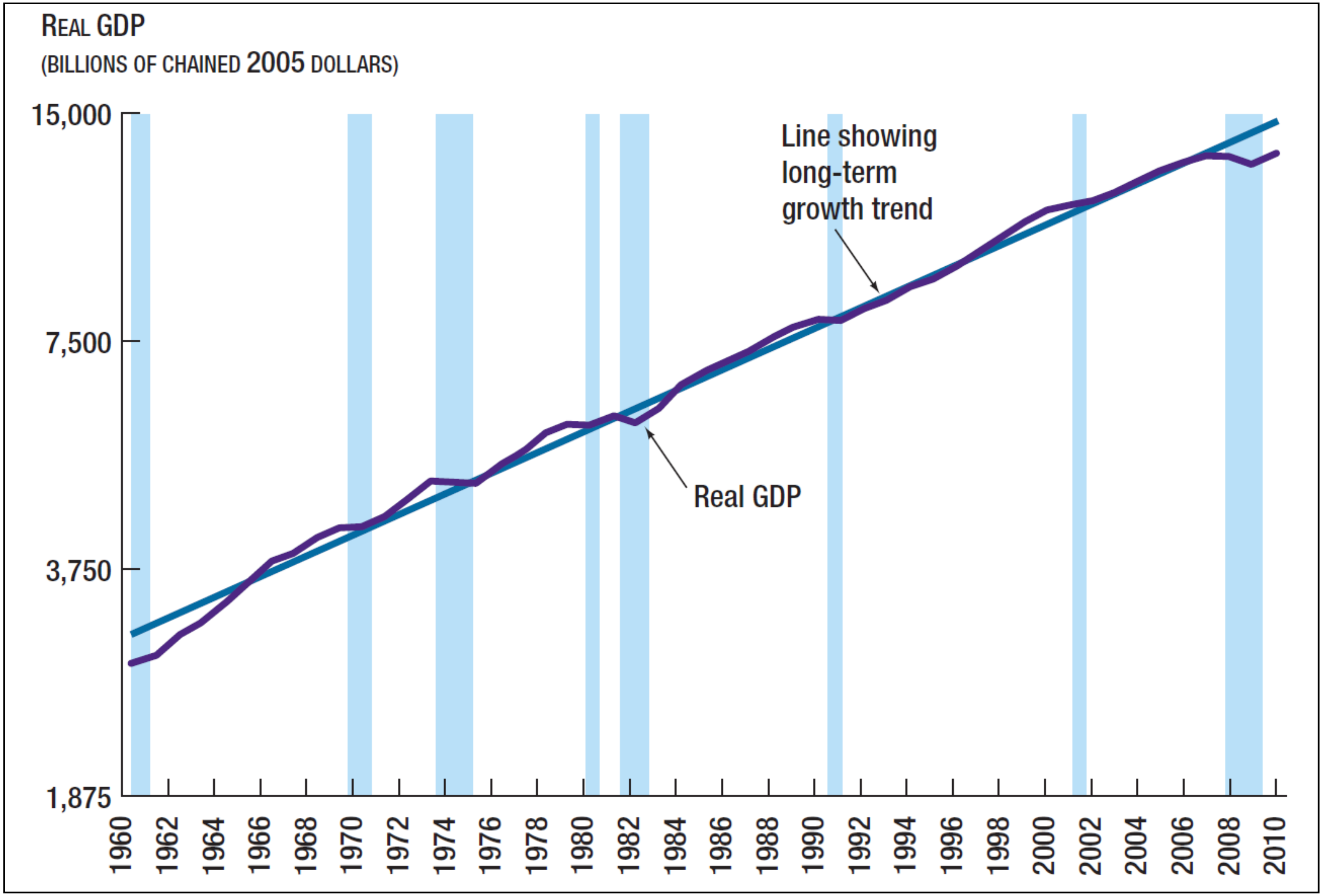
Measuring the Size of the Economy

Real gross domestic product (GDP): a measure of the value of all newly produced goods and services in a country during some period of time, adjusted for changes in prices over time.

Real GDP is the most comprehensive measure of how well the economy is doing.

Economic Growth and Fluctuations

Figure 5-1



Measuring the Size of the Economy

The straight blue line in **Figure 5-1** shows the growth trend in the U.S. real GDP over time.

The purple line shows actual GDP over time. Notice that actual GDP fluctuates around the trend—sometimes above and sometimes below the blue line.

Measuring the Size of the Economy

Economic growth: an upward trend in real GDP, reflecting an expansion in the economy over time.

Economic fluctuations: swings in the real GDP that cause the economy to deviate from its long-term trend.

Economic Growth: The Relentless Uphill Climb

Facts about the U.S. GDP

- The U.S. economy almost tripled in value over the last 40 years. During this period, the U.S. economy grew by a little under 3 percent per year.

- The U.S. real GDP in 2008 was larger than the economies of Japan (the world's second largest economy) and Germany (the world's third largest economy) combined.

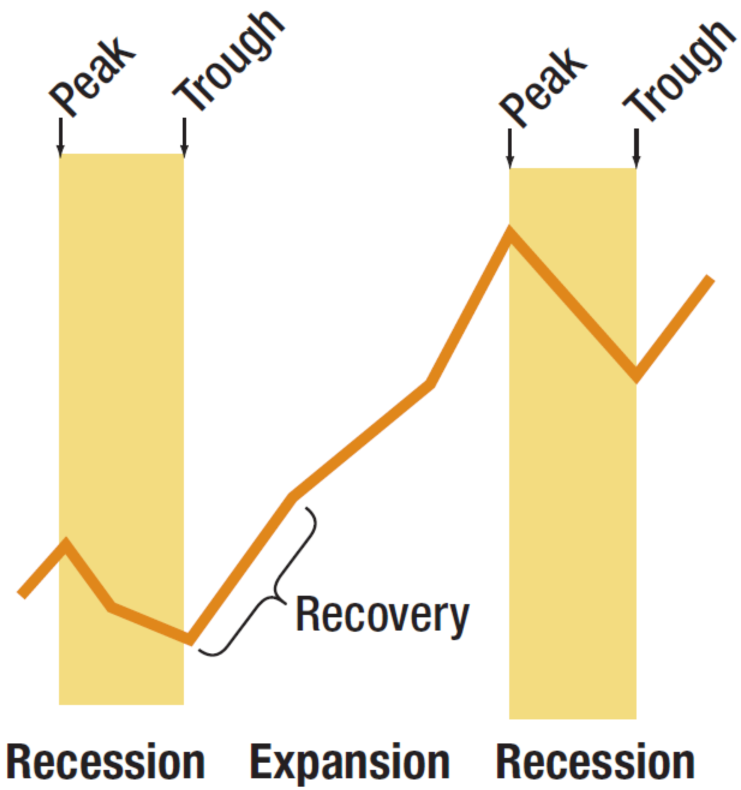
Economic Fluctuations: Temporary Setbacks and Recoveries

Business cycles: the ups and downs in GDP experienced by an economy.

Phases of business cycles:

- Peak
- Recession
- Trough
- Recovery

Economic Fluctuations: Temporary Setbacks and Recovery



Source: p. 110

Economic Fluctuations: Temporary Setbacks and Recoveries

Recession: a decline in economic activity that lasts for at least 6 months.

In the United States, the official designator of business cycles is the National Bureau of Economic Research's (NBER) Business Cycle Dating Committee. They identify key turning points in overall economic activity to identify, and designate as, recessions and expansions.

Economic Fluctuations: Temporary Setbacks and Recoveries

Peak: the highest point in real GDP before a recession.

Trough: the lowest point in real GDP at the end of a recession.

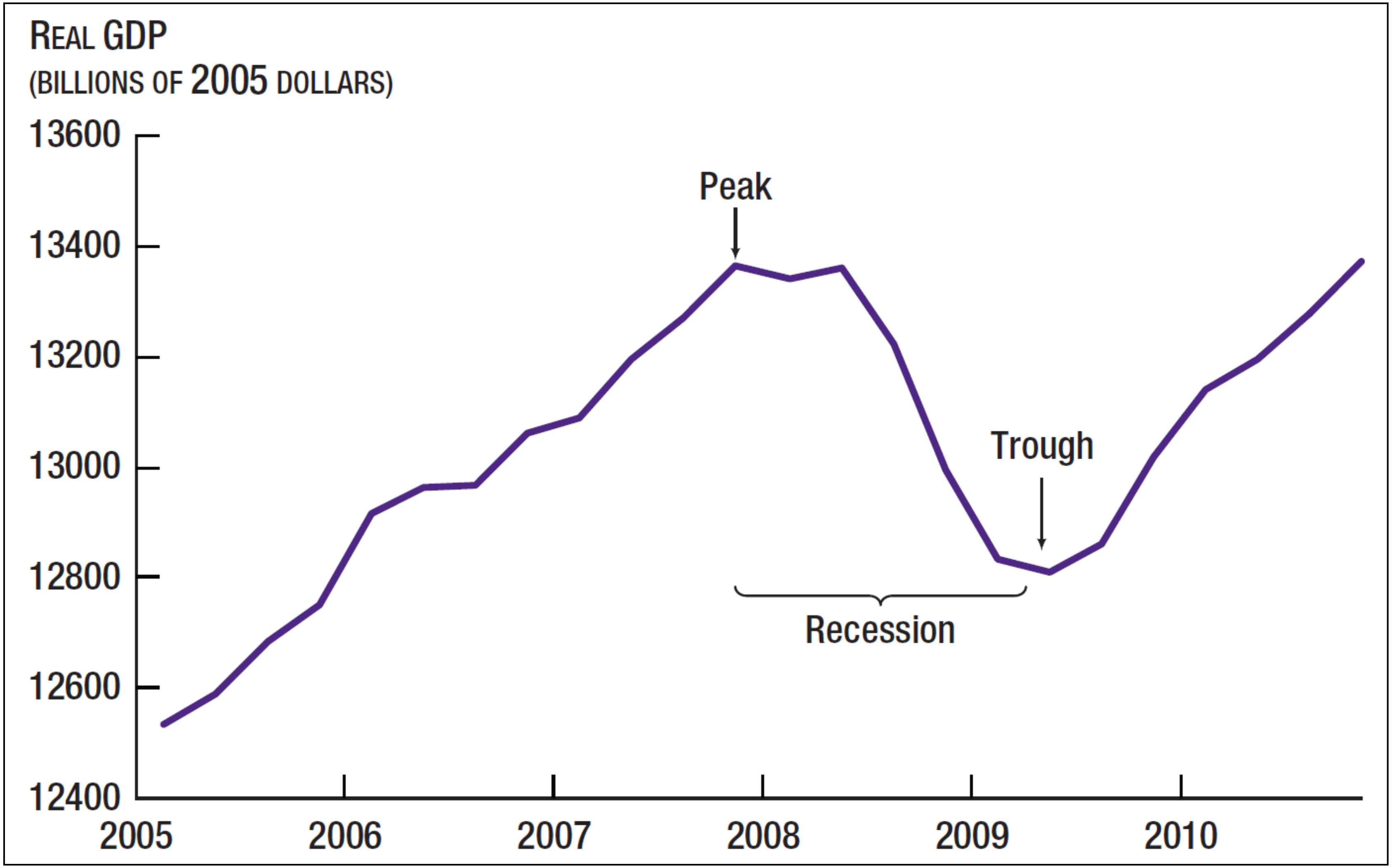
Economic Fluctuations: Temporary Setbacks and Recoveries

Expansion: the period between the trough of the recession and the next peak, representing a general rise in output and employment.

Recovery: the early part of an economic expansion, which occurs immediately after a recession.

Figure 5-3

The Phases of Business Cycles



Comparison of Recessions

Table 5-1

Recession: Peak–Trough	Duration of Recession (months from peak to trough)	Decline in Real GDP (percent from peak to trough)	Duration of Next Expansion (months from trough to peak)
Jan 1920–Jul 1921	18	8.7	22
May 1923–Jul 1924	14	4.1	27
Oct 1926–Nov 1927	13	2.0	21
Aug 1929–Mar 1933	43	32.6	50
May 1937–Jun 1938	13	18.2	80
Feb 1945–Oct 1945	8	11.0	37
Nov 1948–Oct 1949	11	1.5	45
Jul 1953–May 1954	10	3.2	39
Aug 1957–Apr 1958	8	3.3	24
Apr 1960–Feb 1961	10	1.2	106
Dec 1969–Nov 1970	11	1.0	36
Nov 1973–Mar 1975	16	4.9	58
Jan 1980–Jul 1980	6	2.5	12
Jul 1981–Nov 1982	16	3.0	92
Jul 1990–Mar 1991	8	1.4	120
Mar 2001–Nov 2001	8	0.0	72
Dec 2007–June 2009	18	4.1	21*

*As of March 2011.

Source: Columns 1, 2, and 4, National Bureau of Economic Research.

Economic Fluctuations: Temporary Setbacks and Recoveries

- The shortest period of recession in U.S. history was between July 1990 and March 1991.
- The longest period of expansion in U.S. history was between March 1991 and March 2001 (120 months).
- The longest recession since the 1920s was during the Great Depression, when the U.S. economy was in recession for 43 months.

Economic Fluctuations: Temporary Setbacks and Recoveries

The most recent expansion lasted 6 years and ended in 2007.

The most recent recession started at the end of 2007 and continued until June of 2009

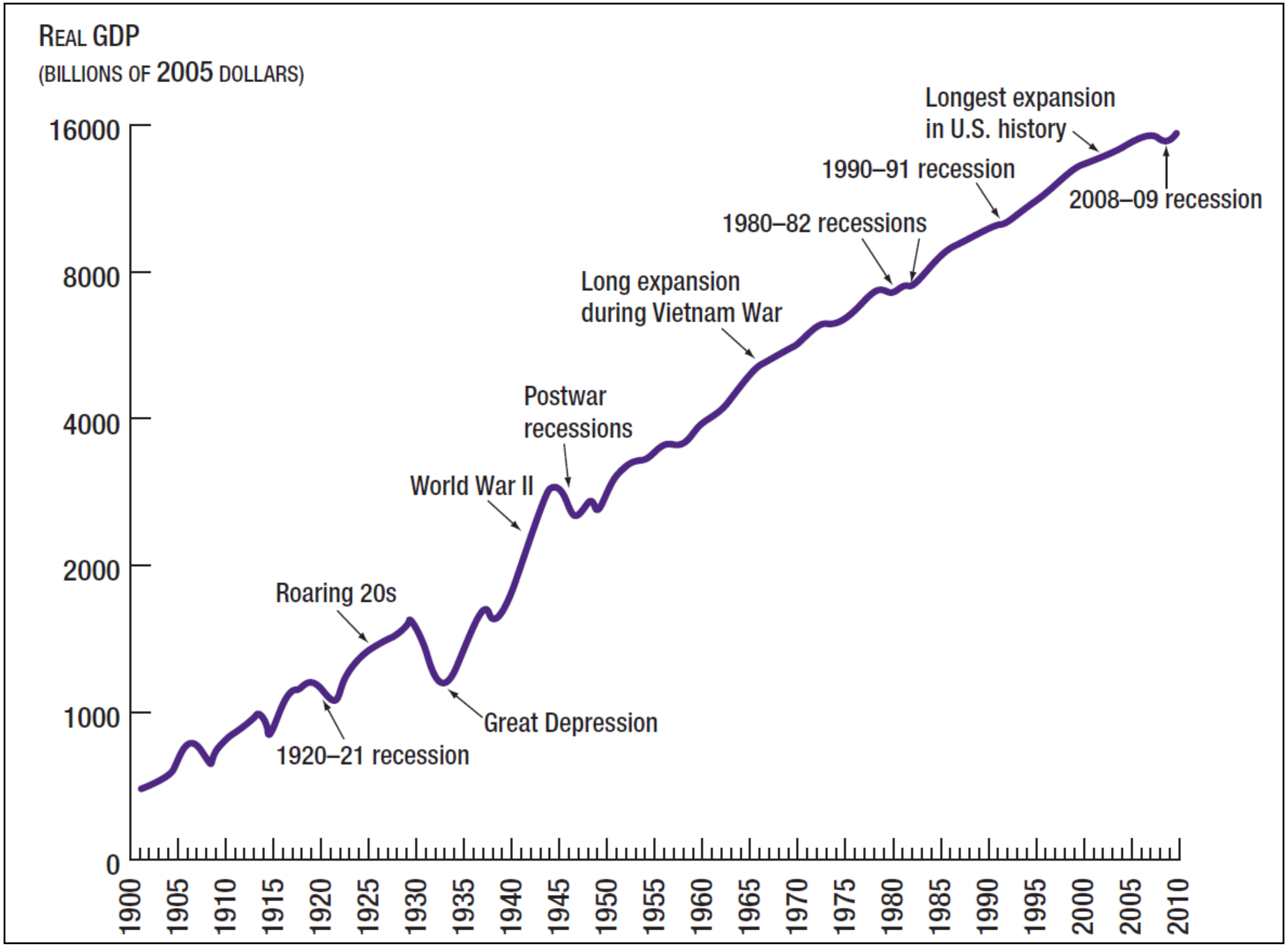
Economic Fluctuations: Temporary Setbacks and Recoveries

Depression*:* a prolonged and deep recession; no formal definition.

The Great Depression was the depression experienced by the United States from August 1929 to March 1933. During this period, real GDP fell by 32.6 percent.

Growth and Fluctuations Since the Early Twentieth Century

Figure 5-4



Unemployment During Recessions

Unemployment rate: the percentage of the labor force that is unemployed.

Labor force*:* workers who are either working (employed) or looking for work (unemployed).

Unemployed*:* workers who are willing to work at a given wage, but who cannot find jobs.

Figure 5-5

The Unemployment Rate

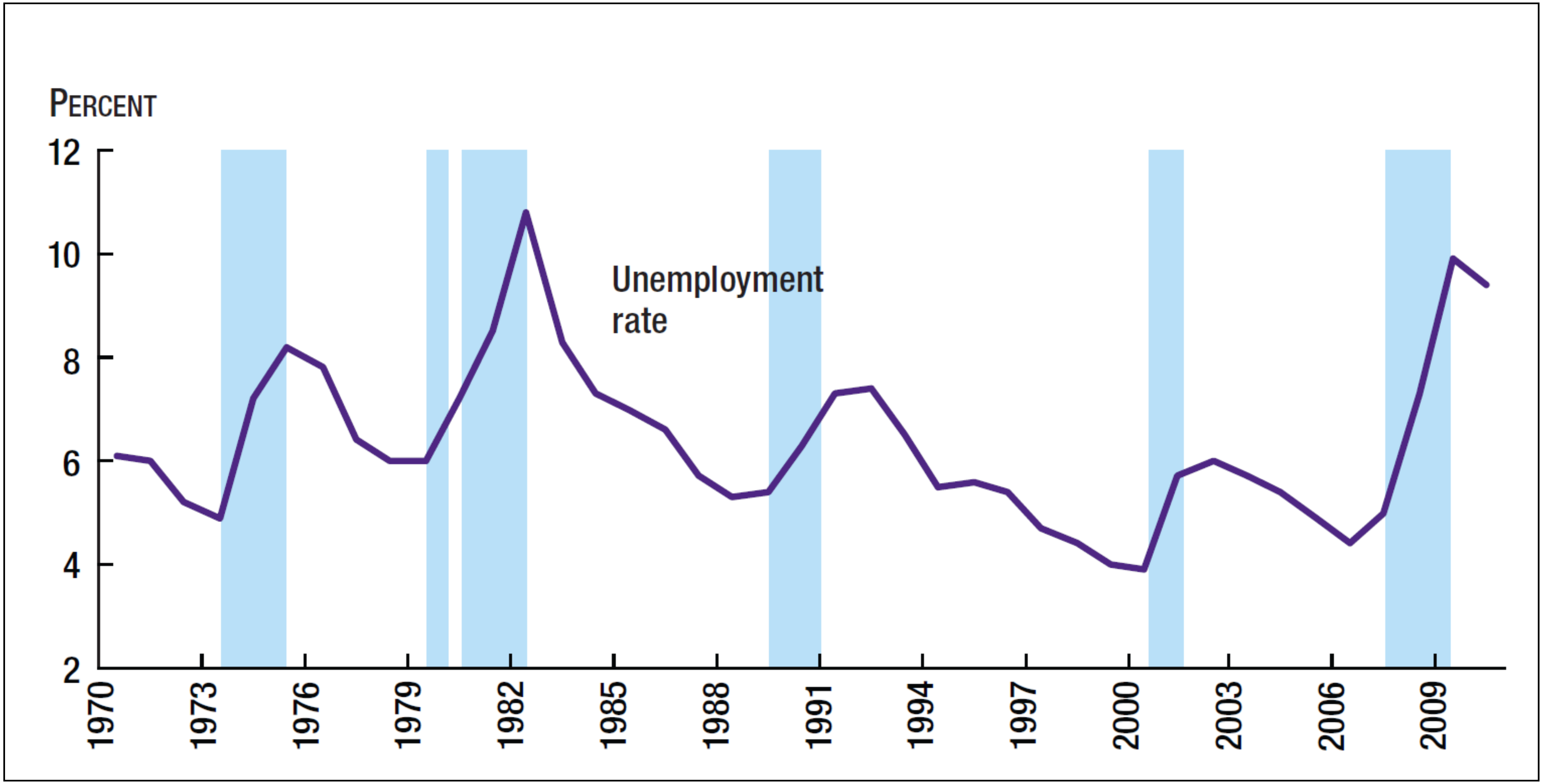


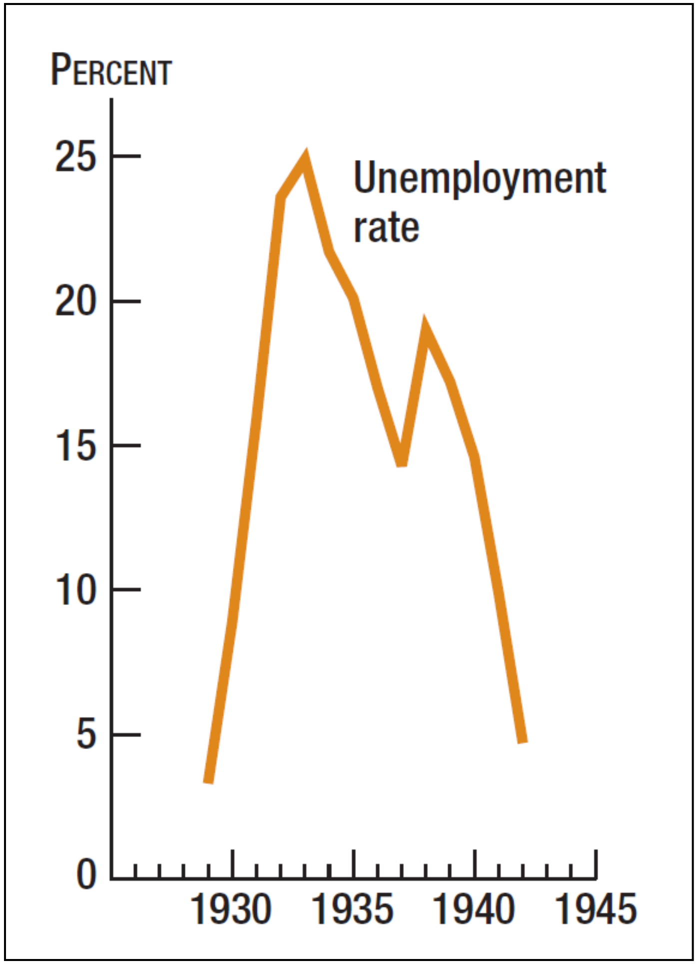
Figure 5-5 The Unemployment Rate

Note:

- The unemployment rate increased by almost 3 percentage points in 2008.
- Similar increases in unemployment were seen in 1973-1975 and 1981-1982.

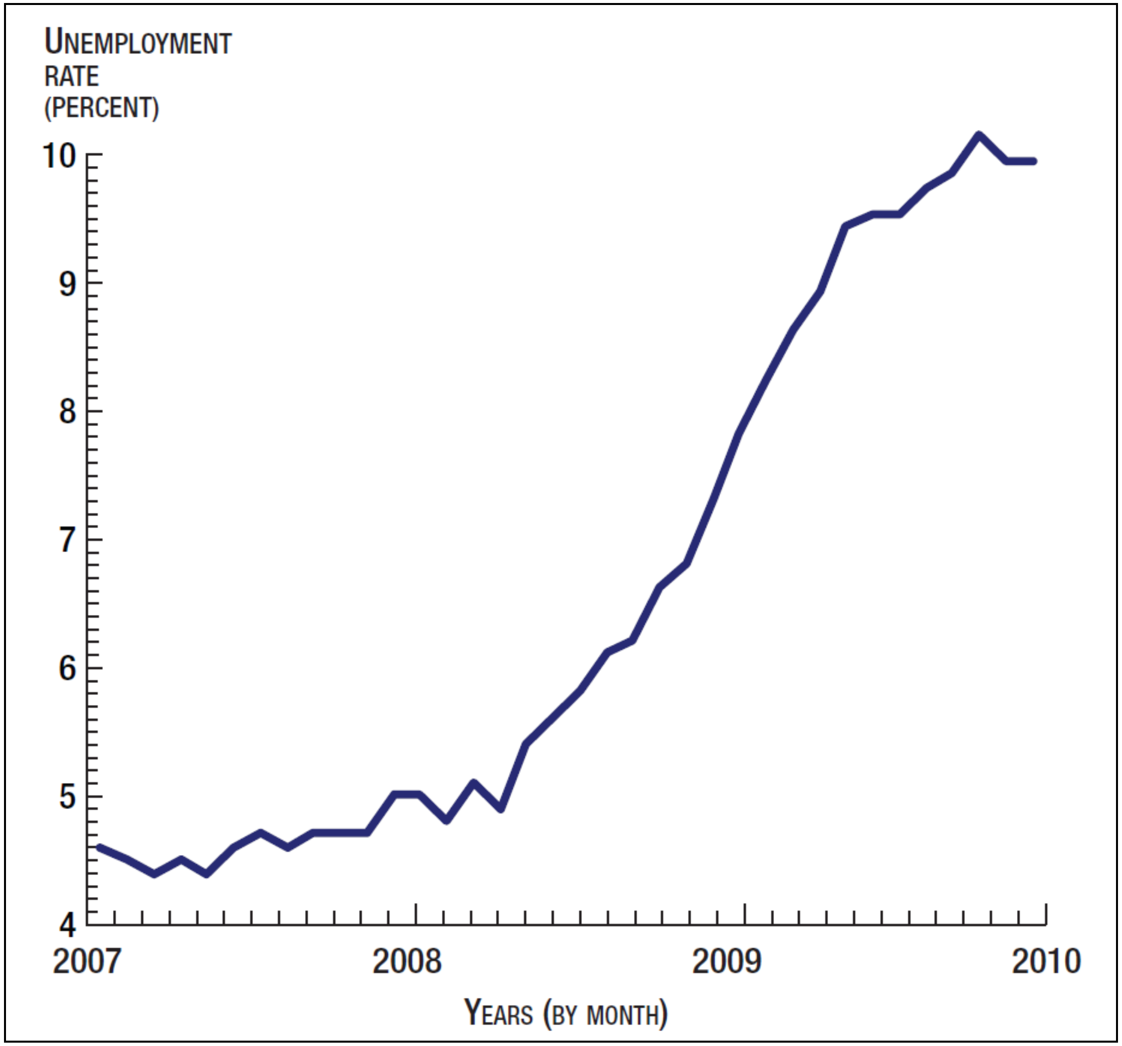
Unemployment during the Great Depression

Figure 5-6



The Rapid Rise of Unemployment in 2008

Figure 5-7



Inflation

Inflation rate: the percentage increase in the overall price level over a given period of time, usually one year.

Disinflation*:* a decline in the inflation rate.

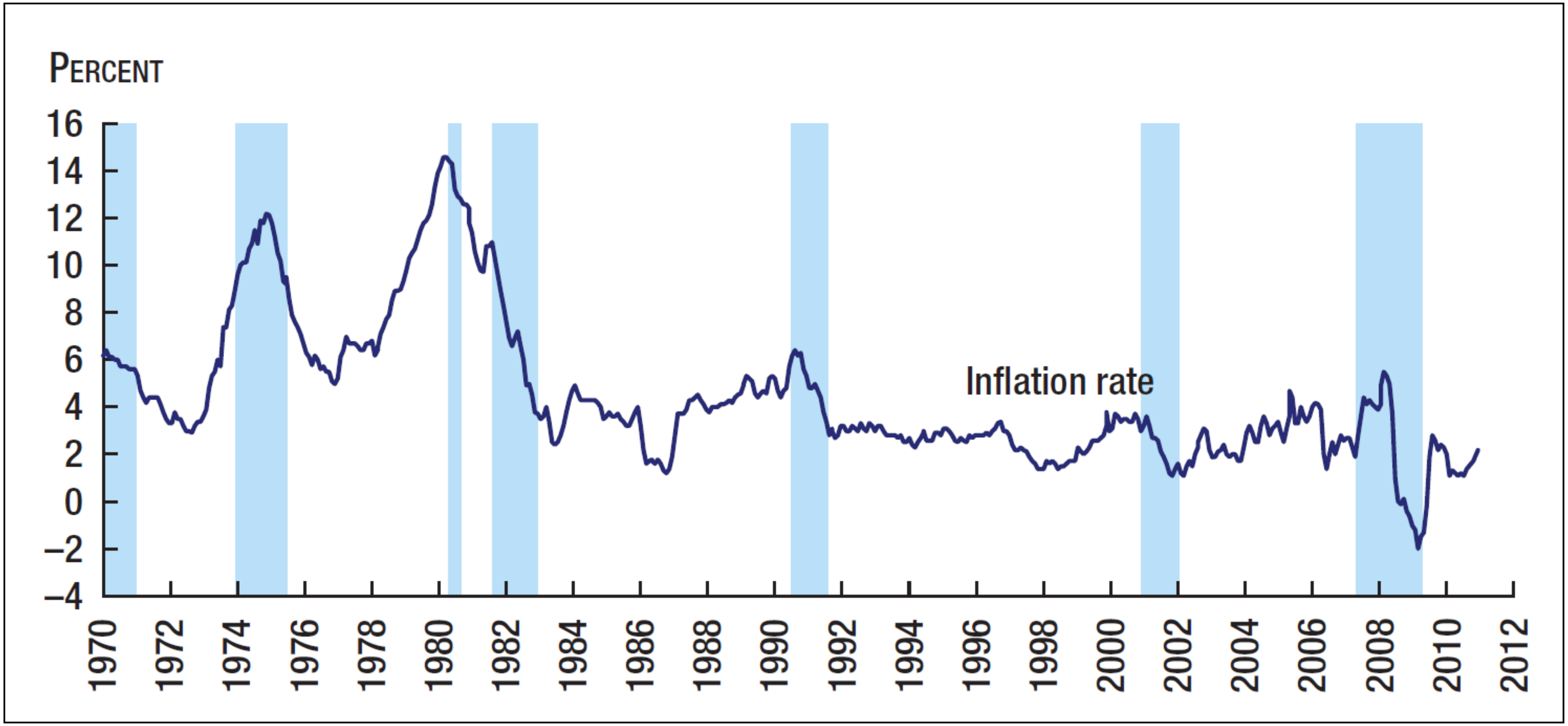
Deflation*:* a negative inflation rate; occurs when the price level drops.

Interest Rates

Interest rate: the amount received per dollar loaned per year, usually expressed as a percentage (e.g., 6 percent) of the total loan.

The Ups and Downs in Inflation

Figure 5-8



Interest Rates

Types of Interest Rates

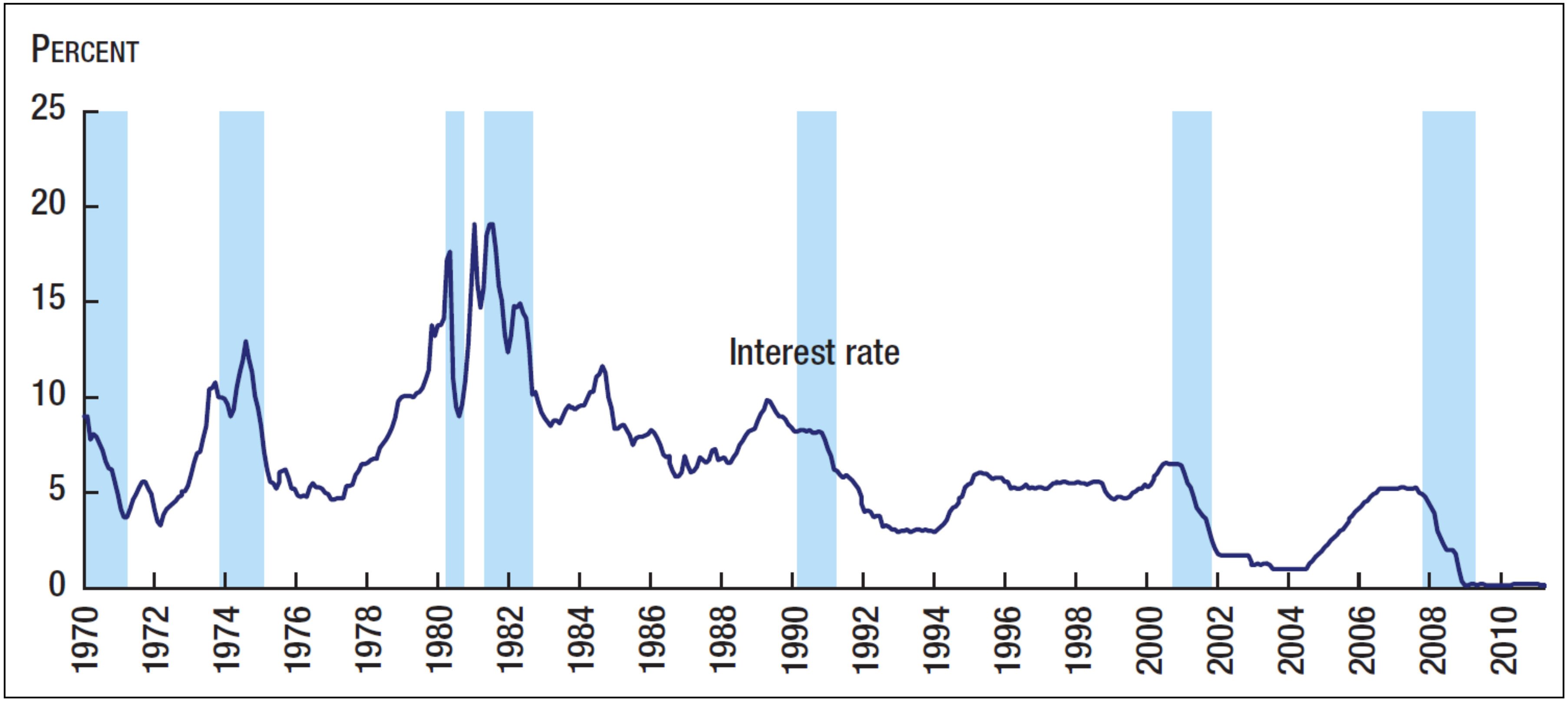
- The mortgage interest rate: the rate on a loan to buy a house.
- Savings deposit interest rate: the rate people get on their savings deposits at banks.
- The Treasury Bill rate: the interest rate the federal government pays when it borrows money from people for one year or less.
- Federal funds rate: the interest rate banks charge one another on very-short-term loans.

Interest Rates

Real interest rate: the interest rate minus the expected rate of inflation. It adjusts the nominal interest rate for inflation.

Nominal interest rate: the interest rate uncorrected for inflation.

Figure 5-9 The Ups and Downs in Interest Rates



The Theory of Long-Term Economic Growth

Potential GDP: the long-term growth trend for real GDP within an economy; determined by the available supply of capital, labor, and technology.

The real GDP fluctuates above and below the potential GDP.

The Theory of Long-Term Economic Growth

Aggregate supply: the total value of all goods and services produced in the economy by the available supply of capital, labor, and technology; also called potential GDP.

The Theory of Long-Term Economic Growth

Labor: the number of hours people are available for work in producing goods and services.

Capital: the factories, improvements to cultivated land, machinery and other tools, equipment, and structures used to produce goods and services.

The Theory of Long-Term Economic Growth

Technology: anything that raises the amount of output that can be produced with a given amount of labor and capital.

Production function: the relationship that describes output as a function of labor, capital, and technology.

The Production Function

Real GDP = F(labor, capital, technology)

where F() means that there is some general relationship between these variables

Government Policy and Economic Growth

Supply-side policies are economic policies that aim to increase long-term economic growth.

- **Fiscal policy**: government policy concerning taxing, spending, and borrowing.
- **Monetary policy**: government policy concerning the money supply and the control of inflation.

Macroeconomic Policy and Economic Fluctuations

Demand-side policies are economic policies that aim to influence economic fluctuations.

Fiscal policy: The primary tools used to influence demand are taxes and government spending.

Monetary policy: The primary tools used to influence demand are interest rates.